July 1987

Interim Guidelines for

- **Home care providers**
- **Long term facilities**

Workplace Prevention and Management of
Acquired Immunodeficiency Syndrome (AIDS)
and Human Immunodeficiency Virus Infections (HIV)

Manitoba
Health

WORKPLACE PREVENTION AND MANAGEMENT OF

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

AND

HUMAN IMMUNODEFICIENCY VIRUS INFECTIONS (HIV)

INTERIM

GUIDELINES FOR

LONG TERM CARE FACILITIES

HOME CARE WORKERS

Manitoba Health

PREFACE

The purpose of this series of infection control guidelines is to provide information on measures which should be taken to prevent the transmission of AIDS virus (HIV) infection in the community, in institutions and in other workplaces.

AIDS virus (HIV) infection is transmitted by the exchange of blood and/or body fluids; it is basically a sexually transmitted infection and modification of sexual practices is the single most important method of preventing infection.

In the workplace, handwashing and caution in the use and disposal of needles are the most important infection control procedures.

Most persons with AIDS virus (HIV) infection are asymptomatic and many are not aware that they are infected. For this reason, appropriate precautions must be taken for all persons at risk of being infected. In most situations the following guidelines are applicable to all persons - whether they are identified as being infected or not.

The titles available under the series of Workplace Prevention and Management of Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus Infections (HIV) are:

Guidelines for hospitals, laboratories, and pathologists
Guidelines for funeral directors
Guidelines for home care providers, and long term facilities
Guidelines for providers of pre-hospital emergency care and resuscitation training
Guidelines for dentistry
Guidelines for correctional and detentional facilities
Guidelines for schools and daycare centres
Guidelines for personal service workers.

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As the bibliography indicates, Canada Diseases Weekly Report (CDWR) and Morbidity Mortality Weekly Report (MMWR) recommendations are the basis for many of these guidelines.

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INTRODUCTION TO AIDS AND AIDS VIRUS (HIV) INFECTION

DEFINITION

Acquired Immunodeficiency Syndrome (AIDS) is a breakdown of the body's immune system - its natural defense against disease. Without this protection, a person is vulnerable to illnesses which a healthy immune system can prevent.

A person with AIDS fights an ongoing battle against many illnesses. Rare forms of pneumonia, skin cancer or brain infection may occur and are eventually fatal.

CAUSE

AIDS is caused by a virus - commonly called the Human Immunodeficiency Virus (HIV) - which attacks the body's immune system. Infection with this virus does not always lead to AIDS. Infected persons may have a mild illness or none at all. As yet, it is not known why some people become ill and others do not. The amount of virus, as well as infection by other viruses, may influence the development of AIDS.

SYMPTOMS

At present, the vast majority of persons with an AIDS virus (HIV) infection (approximately 70%) may feel completely well and have no symptoms. Some infected persons (approximately 25%) have some of the following symptoms: swelling of glands in the neck, armpits and groin, a thick white coating on the tongue, unexplained weight loss, persistent diarrhea, a harsh dry cough, tiredness, fever, or night sweats. These symptoms may be referred to as AIDS-related conditions (ARC). Only about five percent of persons presently infected with the AIDS virus (HIV) have the actual syndrome known as AIDS.

TRANSMISSION (Spread)

How the Virus is Spread

. The AIDS virus (HIV) has been shown to be spread from an infected person to an uninfected person in the following ways:
  - through sexual contact (penis/vagina, penis/rectum, mouth/rectum, mouth/genital)
  - through sharing needles used in injecting drugs,
  - through transfusion or injection of infectious blood or blood products; to help prevent this type of spread, all blood donations in Canada are now screened for evidence of AIDS virus (HIV) infection,
  - from an infected woman to her fetus or newly born baby.

. An individual can be infected with the virus that causes AIDS without having symptoms of AIDS or appearing ill. Infected individuals without symptoms can transmit the infection to others. Once infected, a person is presumed infected for life, but actual symptoms may not develop for many years.

. A single exposure to the AIDS virus (HIV) may result in infection.

How the Virus is NOT Spread

. There is no evidence that the virus is spread through casual social contact such as shaking hands, social kissing, coughing, sneezing, sharing swimming pools, bed linens, eating utensils, office equipment, or being next to or served by an infected person. There is no reason to avoid this type of contact with an infected person.

. It is not spread by the process of giving blood; new transfusion equipment is used for each donor.

. It is not spread by sexual intercourse between uninfected individuals who have maintained an exclusive sexual relationship.

RISK ACTIVITIES

1. Sexual activity with a number of different partners, particularly if they are anonymous.
2. Anal intercourse
3. Intravenous drug abuse.

GROUPS AT RISK

1. Homosexual and bisexual men
2. Intravenous drug abusers
3. Recipients of multiple blood or blood product transfusions prior to 1986
4. Children born to mothers infected with the AIDS virus (HIV)
5. Persons with multiple sex partners.
6. People who are sexually active with individuals who are or may be infected.

AIDS AND AIDS VIRUS (HIV) TESTING

At the present time, blood can routinely be tested only for signs of the virus. These signs are special blood components called antibodies which form in response to the virus. The blood test is available only at the request of a physician and should only be done after appropriate counselling has taken place.

Positive Antibody Test

If antibodies to the AIDS virus (HIV) are found in the blood, it means the person has been infected with this virus at some time. A positive test result does **NOT** mean that a person has AIDS or will get AIDS at some time in the future. It does **NOT** mean the person is immune to (protected from) the virus. It **DOES** indicate that the person has been exposed to the virus, is assumed to carry the virus and could spread it to others.

Negative Antibody Test

A negative test usually means that the person has not been infected with the AIDS virus (HIV).

TREATMENT

At this time there is no treatment which can repair the breakdown of the body's immune system. Treatments are available for many of the illnesses which develop because of the weakened immune system. However, AIDS is always fatal. Most patients die within three years of diagnosis.

PREVENTION

No vaccine is currently available. The only strategy to combat the spread of infection is to prevent the transmission of the virus from one person to another.

PUBLIC EDUCATION

GENERAL PUBLIC

Education of the general public is an essential component of the program to control AIDS and AIDS virus (HIV) infections. Knowledge of how the disease is spread and how to avoid infection should reduce much of the concern which exists in the community. At the same time, accurate information should motivate all individuals to realistically reduce their own risk of acquiring or transmitting this infection.

People infected with the virus may seem completely healthy and may not even know they have it. Although most persons in North America who are known to be infected are in groups at risk, anyone who is exposed can become infected. Therefore, it is prudent for everyone to take precautions to protect themselves from becoming infected. The following information and advice is appropriate for the general public:

- Infection through sexual contact can be avoided by abstaining from sexual activity. Sexually active persons can avoid the AIDS virus (HIV) infection by establishing a mutually exclusive relationship with an uninfected partner.

- Individuals who are sexually active should not have sex with many different people. The more partners one has, the greater the chances of having sex with an infected person.

- The use of condoms is strongly encouraged if there is any possibility that a sex partner has been exposed to or is infected with AIDS virus (HIV). A history of intravenous drug-use or of many sex partners increases the chance that a person may have been infected.

- Sharing needles and syringes should be avoided.

- Anal intercourse should be avoided. It is important to use a condom if one does have anal intercourse.

SCHOOLS

School boards and public health offices are encouraged to develop education programs to inform children, parents, and teachers about AIDS and AIDS virus (HIV) infections. Education about risk factors and risk reduction methods should be factual and non-judgmental.

SCHOOL AND COLLEGE AGED POPULATIONS

Education to these students should emphasize:

- One can virtually eliminate the risk of AIDS and AIDS virus (HIV) infections by saying no to sex and drugs.

- One can reduce the risk of AIDS by practicing responsible sexual behavior with a mutually exclusive partner and avoiding risk activities.

GROUPS AT RISK AND RISK ACTIVITIES

Persons in risk groups and persons who engage in risk activities should be informed about AIDS and AIDS virus (HIV) infections so they can take precautions to minimize their chances of acquiring or transmitting the infection.

The following advice is particularly appropriate for persons who are in known risk groups or who engage in risk activities:

- Use condoms during sexual activity. The proper use of condoms may prevent infection with the virus carried in semen and vaginal fluid.

- Do not have anal intercourse. It can cause sores or cuts in the rectum and the virus may get into the bloodstream through these breaks. If you do have anal intercourse, use a condom.

- Do not have oral sex if you have open sores or cuts in the mouth.

- Do not allow semen, blood, urine or feces to enter the body of a sexual partner.

- Infected women should use a reliable method of contraception to avoid pregnancy.

- Never share needles and syringes with anyone.

- Do not donate blood, organs or sperm.

THE WORKPLACE

It is essential that all individuals be knowledgeable about basic infection control practices and be encouraged to follow them. An educational effort directed to staff in all workplaces is an important aspect of preventing transmission of infections and reducing anxiety and misunderstanding about the infection. Although educational initiatives need to address communicable diseases in general, specific emphasis should be directed at AIDS and AIDS virus (HIV) infections. The goal of this education is to combat fear that is based on misinformation or lack of information and to minimize the risk of transmission of AIDS virus (HIV) by promoting good health practices. These include routine use of infection control precautions and eliminating risk behaviors. Staff also need to be provided with information regarding the signs and symptoms of AIDS virus (HIV) infections, the methods of transmission of the virus and preventive measures. This information should be presented in terms that are easily understood and should include literature in foreign languages if required.

GUIDELINES FOR LONG TERM CARE FACILITIES

These guidelines apply to personal care homes, institutions for the mentally retarded, and any other facilities in which long term care is provided.

I EDUCATION

It is essential that all personnel in long term care facilities understand and follow infection control practices. Although educational initiatives need to address communicable diseases in general, specific emphasis should be directed at AIDS and AIDS virus (HIV) infections. The goals of such an education plan are to combat fear that is based on misinformation or lack of information and to minimize the risk of transmission of AIDS virus (HIV) by promoting good health practices. These include routine use of infection control precautions and elimination of risk behaviors. Staff need to be provided with information regarding AIDS virus (HIV) infections, methods of transmitting the virus and preventive measures. This information should be presented in terms that are easily understood and should include literature in languages other than English, if applicable.

It is essential that protective items such as gloves, masks, gowns, be readily available to staff if needed.

II RESIDENT CARE PRECAUTIONS

Most of the following precautions should be used for all residents. They are particularly important for residents who are or may be infected with the AIDS virus (HIV).

Routine screening for AIDS Virus (HIV) infections of individuals admitted to long term care facilities is not warranted.

Workers should use extreme care to avoid accidental wounds from sharp instruments contaminated with blood or body fluids which are potentially infectious. Contact of open skin lesions with infected blood or body fluids should also be avoided.

HANDWASHING

Hands must be washed before and after all direct resident contact. Hands must be washed thoroughly and immediately if they become contaminated with blood or other body fluids.

GLOVES

Gloves are recommended for contact with blood or body fluids, secretions or excretions, as well as surfaces, materials and objects exposed to them.

NEEDLES AND SYRINGES

Workers should use extreme care to avoid accidental wounds from needles and sharp instruments.

Needles and syringes should be disposable and disposed of in rigid, non-permeable, puncture-resistant containers. If reusable syringes are used, they must be decontaminated before reprocessing.

Needles should NOT be recapped and should NOT be purposely bent or broken by hand.

BLOOD/BODY FLUID SPILLS

Blood and body fluid spills should be wiped up immediately with an appropriate disinfectant such as bleach solution (See Glossary, page 19) to be prepared daily.

GOWNS

Gowns should be worn if clothing may be soiled with blood, body fluids, secretions or excretions.

MASKS

Masks are not necessary for routine care of AIDS virus (HIV) infected persons.

Masks are recommended for workers who have close sustained contact with persons who are coughing extensively, who are intubated and being suctioned, or who are in other situations in which splatter with blood and body fluids may occur.

LABORATORY
SPECIMENS

Blood and other body fluid specimens such as urine, stool, sputum or semen should be placed in sterile containers with the lid securely closed. If the outside of the specimen container is visibly contaminated, it should be cleaned with a disinfectant (see above). Containers should be clearly labelled "Blood and Body Fluid Precautions" and then placed in a clear impervious plastic bag.

Each lab specimen should be placed in a separate bag. These specimens should not be transported in a pneumatic/vacuum system.

Requisitions accompanying these specimens also should be marked with "Blood and Body Fluids Precautions" stickers. The requisition should be attached to the outside of the bag to avoid the risk of contamination.

ARTICLES

Gloves must be worn while handling contaminated articles.

Disposable patient care supplies should be used whenever possible.

Articles soiled with blood/body fluids should be placed in an impervious bag labelled "Blood and Body Fluid Precautions" before being sent for reprocessing or disposal.

Disposable items should be incinerated or disposed of in accordance with the facility's policy for the disposal of infectious waste.

Reusable items should be reprocessed according to facility policies for contaminated items.

LINEN

Mattresses and pillows should be covered with impervious plastic. No special precautions are needed with linens unless they are contaminated with blood or body fluids in which case they should be double-bagged and processed according to the facility's existing policy regarding linens from residents on isolation precautions.

PRIVATE ROOMS

Private rooms are not routinely necessary for persons with AIDS virus (HIV) infection.

For the safety of other residents, residents who exhibit aggressive behavior (e.g. biting, sexual assault), should be provided with a separate room.

DISHES

No special precautions are necessary. There is no reason for persons with AIDS or AIDS virus (HIV) infection to use eating utensils designated for their use only. Dishes may be washed in the usual way with other dishes.

GUIDELINES FOR HOME CARE WORKERS

Persons infected with AIDS virus (HIV) can be safely cared for in the home. When providing health-care services in the home to persons infected with AIDS virus (HIV) or those at risk of being infected, measures similar to those used in hospitals are appropriate for both professional workers and family members.

HANDWASHING

Hands must be washed before and after all direct patient contact and must be washed thoroughly and immediately if they become contaminated with blood or body fluids.

GLOVES

Gloves are recommended for contact with blood or body fluids, secretions or excretions, as well as surfaces, materials and objects exposed to them.

NEEDLES AND SYRINGES

Workers must use extreme care to avoid accidental wounds from needles and sharp instruments.

Needles should NOT be recapped and should NOT be purposely bent or broken by hand.

Disposable needles and syringes should be used.

Needles (and other sharp instruments) should be placed into puncture-resistant containers and disposed of in accordance with local regulations for solid waste.

Before discarding syringes, draw full strength household bleach into the syringe and then place in a puncture-resistant container (e.g., wide mouth plastic jar with screw cap). This container should then be placed in a plastic garbage bag and discarded with other household garbage.

BLOOD/BODY FLUID SPILLS

Blood and body fluid spills should be wiped up immediately with an appropriate disinfectant, e.g. bleach solution (See Glossary, page 19) to be prepared daily.

GOWNS

Gowns may be worn if there is a possibility of clothing being soiled with blood, body fluids, secretions or excretions. However, an impervious apron may be more appropriate in this setting.

MASKS

Masks are not necessary for routine care of AIDS virus (HIV) infected persons.

If patient is coughing extensively, the use of masks should be discussed with appropriate medical personnel.

SPHYGMOMANOMETER AND STETHOSCOPE

If sphygmomanometer or stethoscope should become visibly contaminated, they should be wiped thoroughly wipe with a bleach solution (See Glossary, page 19).

THERMOMETERS

Thermometers should be reserved for patient use only.

Thermometers should be cleaned by washing with warm soapy water and then soaking in 70% alcohol for 10 minutes.

LINEN

Clothing contaminated with blood/body fluids should be stored in a plastic bag and washed in hot water.

DISHES

No special precautions are necessary. There is no reason for persons with AIDS or AIDS virus (HIV) infection to use eating utensils designated for their use only. Dishes may be washed in the usual way with other dishes.

WASTE DISPOSAL

A separate container, lined with a plastic bag should be available in the patient's room for waste such as dressing and tissues. This should be secured and discarded with other household garbage.

BATHROOMS

Bathroom facilities may be shared with other family members.

PERSONAL ARTICLES

Toothbrushes, razors, and razor blades should not be shared with other family members. Used razor blades should be disposed of in the same manner as needles.

MANAGEMENT OF POSSIBLE WORKPLACE EXPOSURE TO AIDS VIRUS (HIV)

If a worker or a patient/client has a needle puncture or cut to the skin or mucous membrane (e.g., splash to the eye or mouth) exposure to blood or other body fluids, the source person should be assessed clinically and epidemiologically by a physician to determine the possibility of AIDS virus (HIV) infection.

If such infection may exist, the source person should be informed of the incident and requested to consent to blood testing for evidence of AIDS virus infection. If the source patient is found to be infected or declines testing, the person who was exposed to possible infection should be evaluated clinically and serologically for evidence of AIDS virus (HIV) infection as soon as possible. If the exposed person's first blood test is negative, he or she should be retested after a period of 6 weeks and again at 3, 6 and 12 month intervals to determine if transmission has occurred. If the source person continues to show a negative test and has no evidence of AIDS virus (HIV) infection, no further follow-up is necessary.

GLOSSARY

AIDS	Acquired Immunodeficiency Syndrome.
ARC	AIDS-related Complex.
HIV	Human Immunodeficiency Virus: the agent which causes AIDS; formerly known as Human T-Lymphotropic Virus III/ Lymphadenopathy Associated Virus (HTLV-III /LAV).
HCW	Health Care Worker
HBV	Hepatitis B Virus
PSW	Personal Service Worker
Antiseptic	a chemical having the ability to destroy potentially infective micro-organisms and which can be used safely on living tissues.
Bleach Solution	the most commonly recommended disinfectant in these guidelines is bleach solution (i.e. a 0.5% sodium hypochlorite solution which can be prepared by mixing household chlorine bleach - (5.25%) one part bleach to nine parts water). It must be prepared fresh daily. This solution is corrosive and must be used with caution on metal surfaces.
Cleaning	Scrubbing and washing, with hot water, soap or detergent to remove infectious agents and/or organic matter from surfaces.
Disinfection	the use of germicidal chemical agents to destroy infectious agents.
Sterilization	the use of a physical process or chemical agents to eliminate all viable microorganisms. Steam and gas autoclaving and dry heat ovens are the most common methods.

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